

**ABSTRACT**

A printing mechanism includes an elongate support structure. A pair of busbars is mounted on the support structure. A plurality of printed circuit boards is mounted on the support structure to be electrically connected to the busbars. Each printed circuit board includes print engine control circuitry that is configured to control operation of a number of printhead chips. A plurality of ink distribution structures is mounted on the support structure and connectable to a supply of ink. A plurality of printhead modules is mounted on respective ink distribution structures. Each printhead module has a carrier and a printhead chip positioned on the carrier. Each printhead chip has a plurality of nozzle arrangements that are positioned on a wafer substrate. Each nozzle arrangement incorporates a micro-electromechanical actuator for ejecting ink from a nozzle chamber and is mounted on a respective ink distribution assembly. A number of the printhead chips are connected to the print engine control circuitry such that each nozzle arrangement can receive data signals from the print engine control circuitry.